



# The World's Highest Performance Notebook PC Processor

The Mobile AMD Athlon™ 4 Processor

# Agenda



- ❑ AMD's strategy for 2001 and beyond
- ❑ Innovative notebook solutions
  - Mobile AMD Athlon™ 4 processor
  - Mobile AMD Duron™ processor



# The 2001 AMD Story

Entering New Markets

# Strategy for 2001 and Beyond



- ❑ **Build on strong desktop computing foundation**
  - Maintain our strong position in consumer desktop
  - Grow our commercial business
  - Continue to extend the breadth of support for Socket A
- ❑ **Deliver leadership solutions for notebook computers**
  - Establish AMD Athlon™ processors with AMD PowerNow!™ technology as the standard for performance notebooks
  - Debut AMD Duron™ processors with AMD PowerNow! technology to deliver robust features for value notebooks
  - Leverage our innovative technologies such as AMD PowerNow! technology to differentiate our solutions as market leaders
- ❑ **Debut multiprocessing platforms for high-performance workstations**
  - Extend the AMD Athlon processor's proven performance in the 1-way workstation market to the 2-way workstation environment with the introduction of the multiprocessing-capable "Palomino" core and the AMD-760™MP chipset
- ❑ **Introduce innovative multi-way server solutions**
  - Initiate AMD's attack into the 1- and 2-way server market with the introduction of the multiprocessing-capable "Palomino" and "Morgan" cores and the AMD-760MP chipset
  - Deliver 4- and 8-way enterprise server solutions with the "Hammer" family of products
  - Introduce x86-64 technology with our "Hammer" products to enable seamless 32- and 64-bit computing

# Mobile AMD Athlon™ 4 Processor

## Setting the Standard for Notebook Performance



- ❑ The mobile AMD Athlon™ 4 processor is the world's **highest performance** PC processor for notebook computing
- ❑ The mobile AMD Athlon 4 processor features **AMD PowerNow!™ technology which is capable of extending battery life up to 30%** without compromising performance
- ❑ The mobile AMD Athlon 4 processor is available at frequencies of 1GHz, 950MHz, 900MHz and 850MHz
- ❑ Systems are planned for **immediate availability from Compaq**. Additional systems are expected from other OEMs this quarter

# Mobile AMD Athlon™ 4 Processor

## Next-Generation Features



	AMD Athlon™ Processor	Mobile AMD Athlon 4 Processor
Infrastructure	Socket A	Socket A
Process Technology	0.18 micron	0.18 micron
# of Transistors (die size)	37 million (120 mm <sup>2</sup> )	37.5 million (128 mm <sup>2</sup> )
Relative Power Consumption	--	<b>~20% reduction</b>
High-Performance Full Speed Cache	384k total	384k total with <b>data pre-fetch</b>
3D and Multimedia Instructions	Enhanced 3DNow!™	<b>3DNow! Professional</b> (adds 52 new instructions)
Mobile Specific Features	No	<b>AMD PowerNow!™ technology</b> <b>Thermal diode</b> <b>Low voltage operation</b>

# Run Longer, Run Stronger



- ❑ Able to extend system battery life
- ❑ Enables notebooks to be cooler and quieter
- ❑ Delivers performance when you need it

## Three distinct operating modes

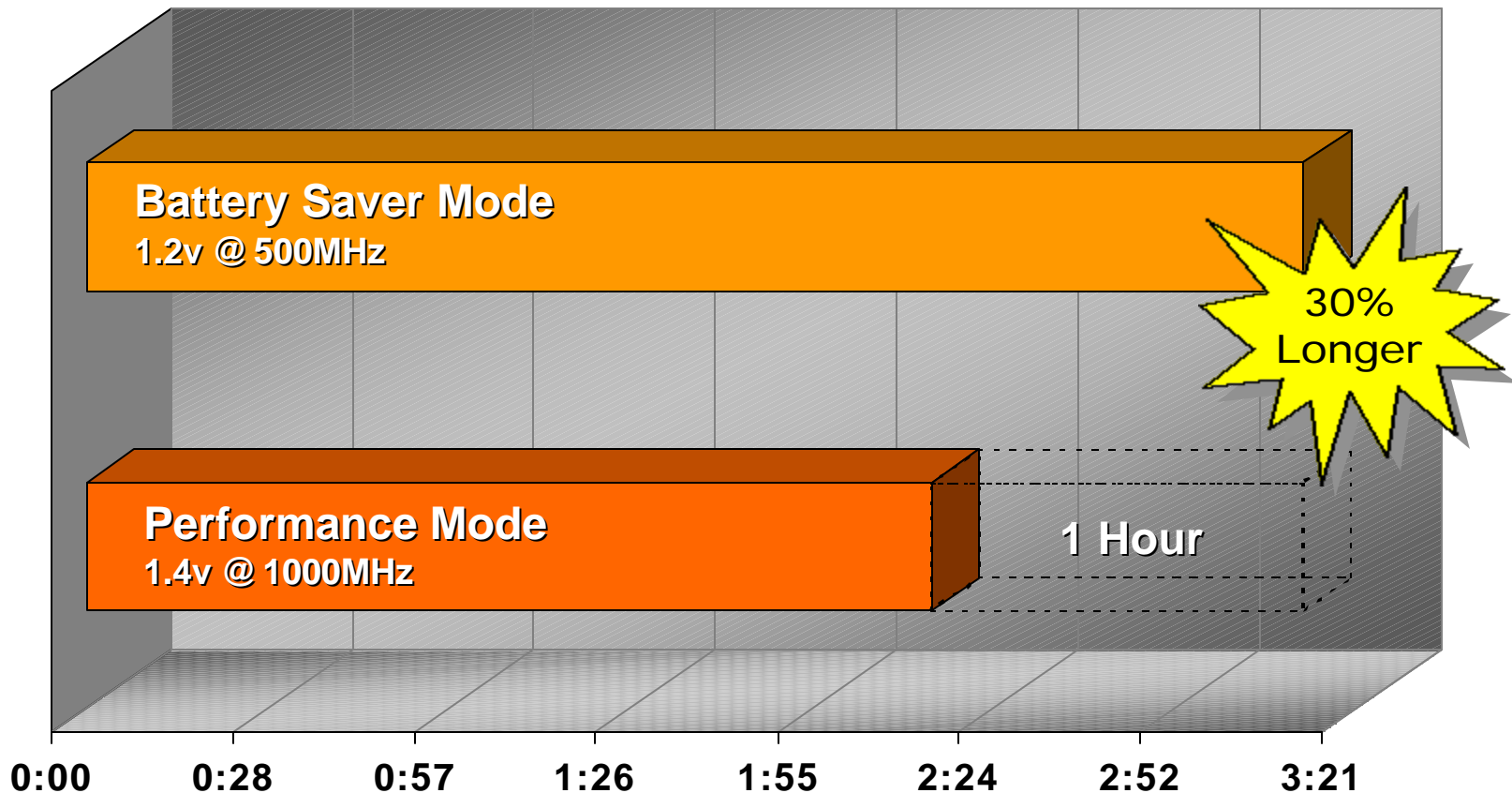
- Automatic
  - *Delivers performance on demand*
  - *Optimal balance of performance and battery life*
- High-Performance
  - *Processor always runs at maximum performance*
- Battery-Saver
  - *Processor always runs at lowest power state*
  - *Enables maximum battery life*

# AMD PowerNow!™ Technology

## Lengthening Battery Life to get the Job Done



Ziff Davis BatteryMark™ v3.0 Battery Rundown Time



\*See backup slides for system configuration details



# Mobile AMD Athlon™ 4 Processor

## Delivering the Ultimate Computing Experience



### Home Computing

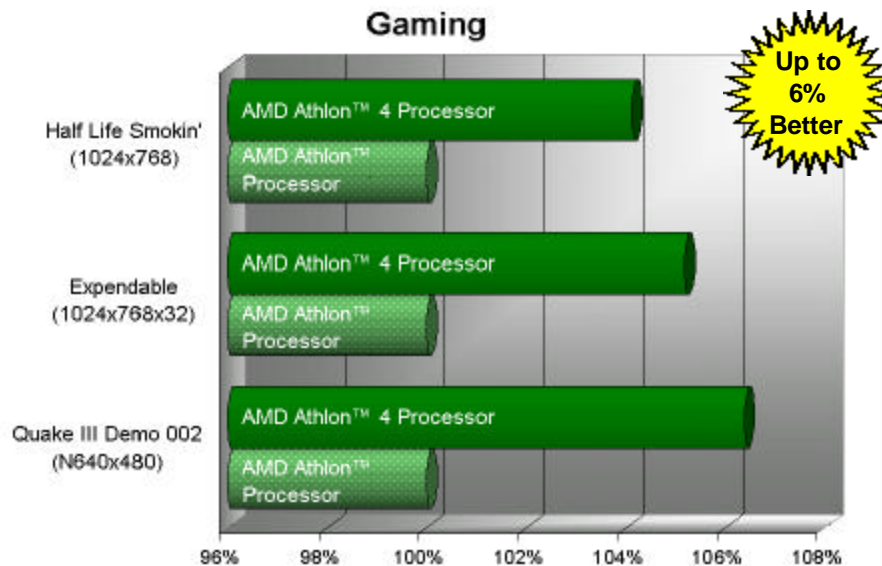
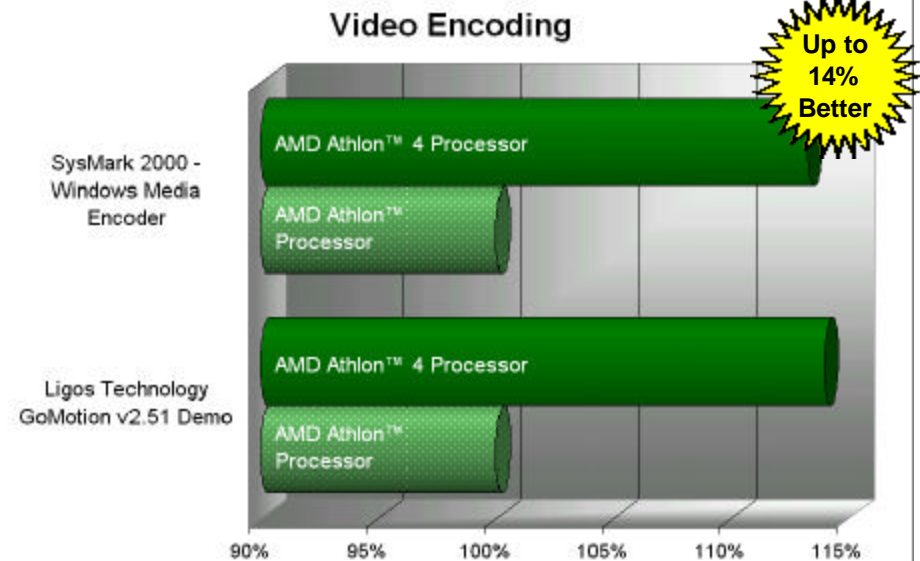
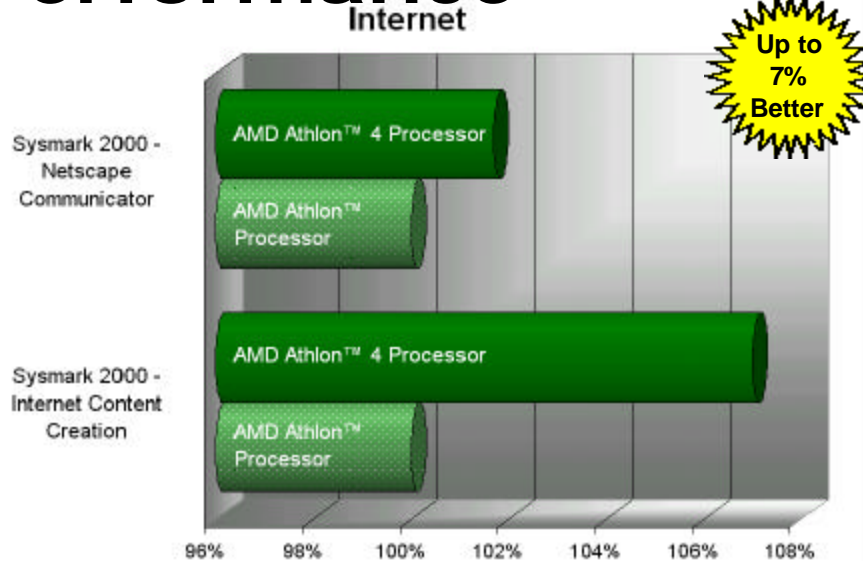
- ❑ Mobile AMD Athlon™ 4 processors build on the tradition of the AMD Athlon processor and continue to deliver the ultimate computing experience
- ❑ Designed to provide the capability you need to handle your home computing tasks
  - Internet
  - Audio, Video and Image Editing
  - Productivity
  - Gaming

### Business Computing

- ❑ Mobile AMD Athlon 4 processor sets the standard for unparalleled business productivity
- ❑ Gives the all-day, everyday computing power you need to tackle your business computing needs
  - Digital Content Creation
  - Productivity
  - Compute Intensive Applications
  - Modeling, Animation and Rendering

**Mobile AMD Athlon™ 4 processors are higher performing  
than any other mobile PC processor!**

# Building on AMD Athlon™ Performance

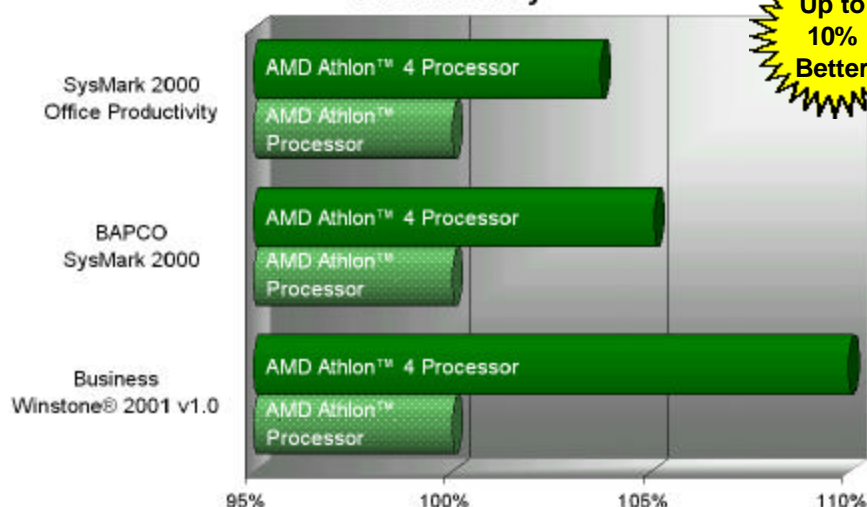


The mobile AMD Athlon™ 4 processor builds on the AMD Athlon processor's industry-leading performance by delivering **up to 14% more** on industry standard benchmarks.

# Building on AMD Athlon™ Performance

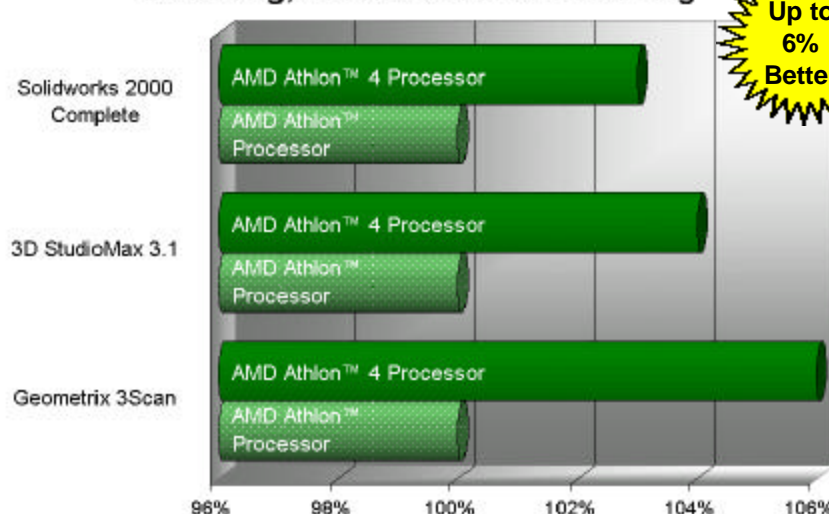


## Productivity



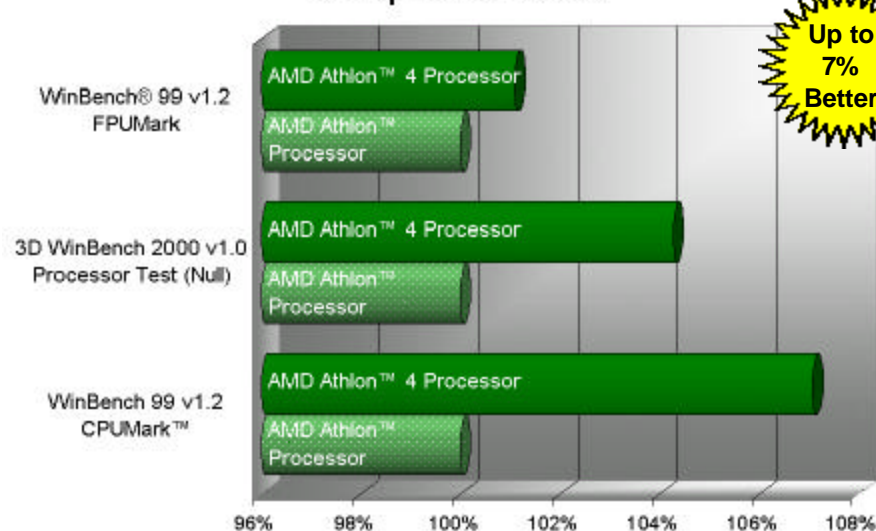
Up to  
10%  
Better

## Modeling, Animation and Rendering



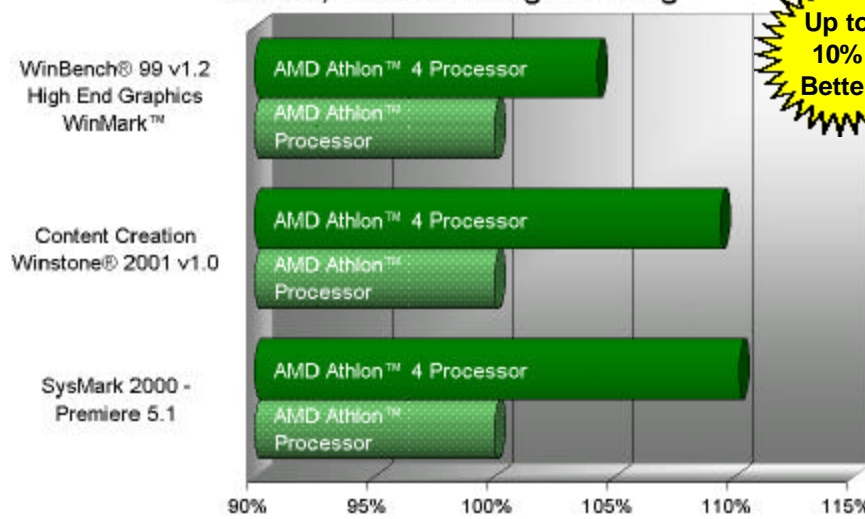
Up to  
6%  
Better

## Compute Intensive



Up to  
7%  
Better

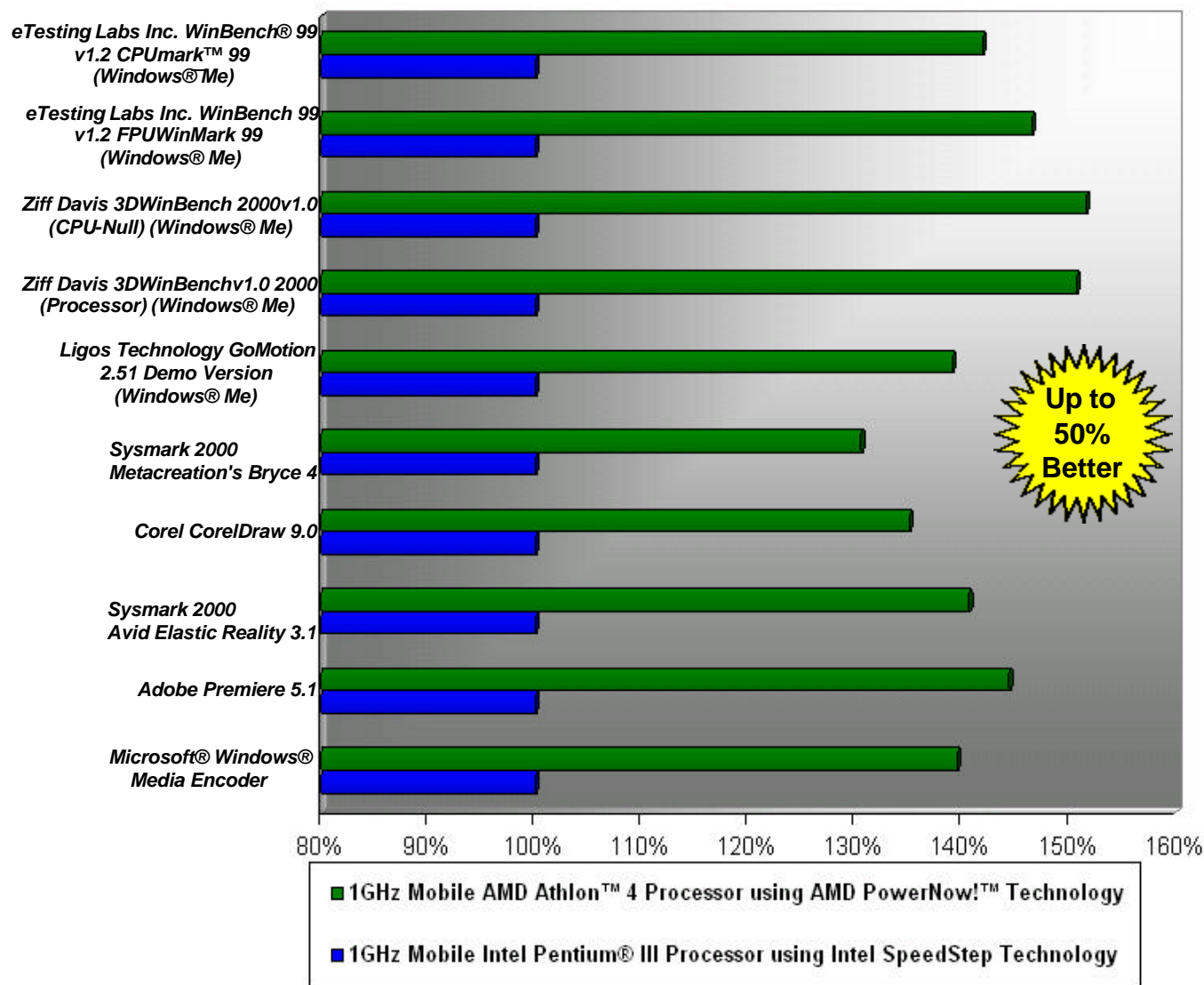
## Audio, Video & Image Editing



Up to  
10%  
Better

# AMD PowerNow!™ Technology

## Delivering Performance While on Battery Power



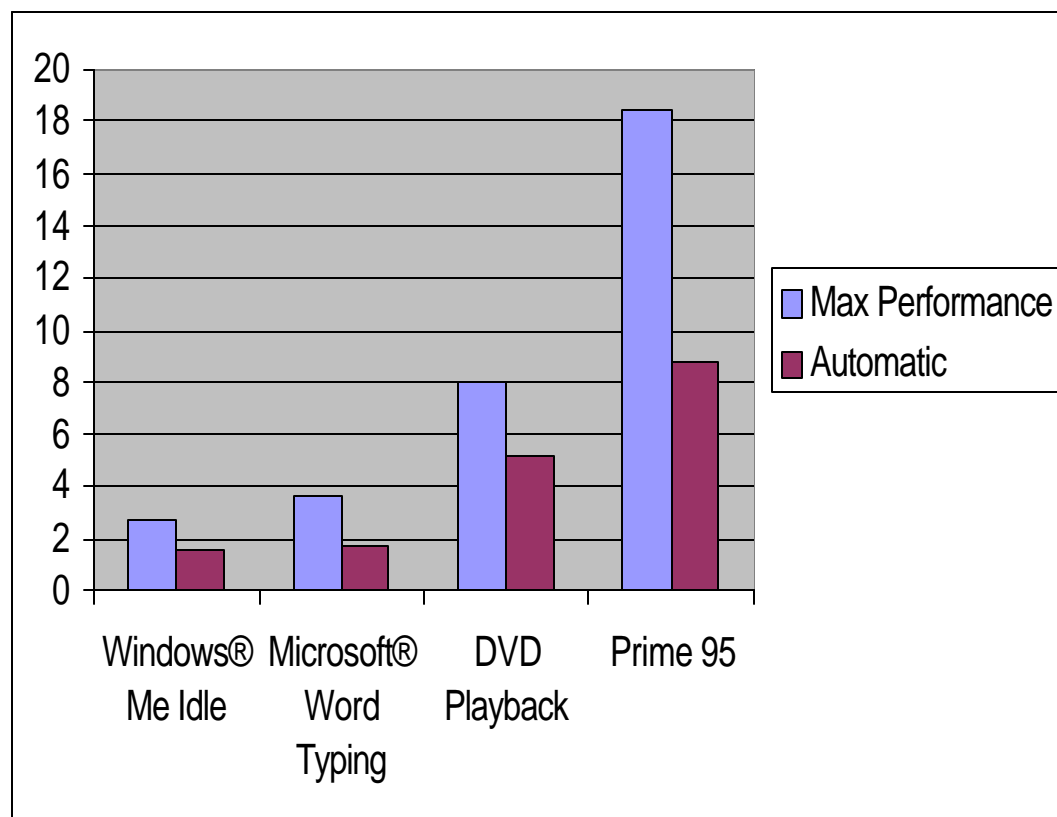
- ✓ Delivers performance the instant you need it while operating on batteries
- ✓ Automatic mode delivers the performance and battery life benefits with no hassle for the user
- ✓ These benchmarks illustrate the dramatic difference between AMD PowerNow!™ technology and competitive attempts

# 1GHz Mobile AMD Athlon™ 4 Processor

## Average Power Measurements



*Mobile Power Measurements*



*Application*

- Running typical office applications, the mobile AMD Athlon™ 4 processor consumes as little as 2 watts average power in the AMD PowerNow!™ technology automatic mode
- Even on more demanding applications, the AMD PowerNow! technology automatic mode enables significant power conservation

# New Mobile AMD Duron™ Processor



- ❑ The new mobile AMD Duron™ processor offers an **optimum combination of features and performance** in a value notebook
- ❑ The **only value-oriented mobile PC processor which brings battery-saving features** like AMD PowerNow!™ technology to entry-level, full-size notebooks
- ❑ The new mobile AMD Duron processor will be available at frequencies of 850MHz and 800MHz
- ❑ Systems planned from **Compaq and other OEMs**

# New Mobile AMD Duron™ Processor

## Optimized Features for Value Computing

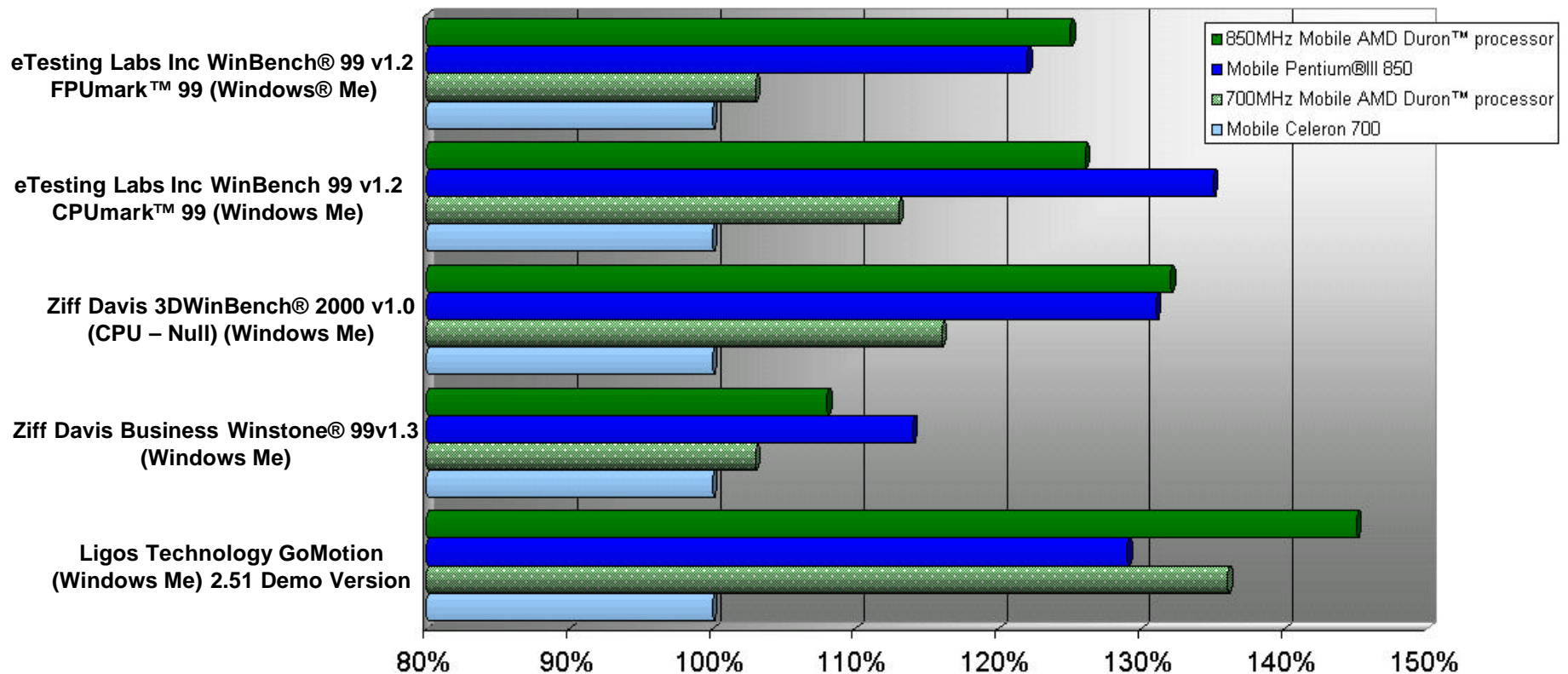


	AMD Duron™ Processor	New Mobile AMD Duron™ Processor
Infrastructure	Socket A	Socket A
Process Technology	0.18 micron	0.18 micron
Relative Power Consumption	--	<b>~20% reduction</b>
High-Performance Full Speed Cache	192k total	192k total with <b>data pre-fetch</b>
3D and Multimedia Instructions	Enhanced 3DNow!™	<b>3DNow! Professional</b>
Mobile Specific Features	No	<b>AMD PowerNow!™ technology</b> Thermal diode Low voltage operation



# Leading Performance in Value Notebooks

## 850MHz Mobile AMD Duron™ Processor Benchmarks



- ❑ The mobile AMD Duron™ processor significantly outperforms the mobile Celeron processor and is competitive with the mobile Intel Pentium® III processor at the same speed grades



# AMD's Mobile Platform Stability



- ❑ Mobile platforms based on AMD's Socket A platform provide unrivaled stability and longevity
- ❑ AMD's established Socket A platforms provide the most stable infrastructures for commercial PC computer systems

# Summary



- ❑ AMD is delivering solutions for all major computer markets: desktop PCs, notebooks, servers and workstations.
- ❑ The new mobile AMD Athlon™ 4 and new mobile AMD Duron™ processor families are designed to provide the highest performance in their class and to enable innovative PC notebook solutions for home and business users.
- ❑ The mobile AMD Athlon 4 processor and the mobile AMD Duron processor both feature AMD PowerNow!™ technology, which can extend battery life by up to 30%.
- ❑ Systems based on these processors are available immediately from Compaq and planned for availability from other OEMs this quarter.
- ❑ The multiprocessing and desktop versions of the “Palomino” cores are planned to be announced in Q2 and Q3, respectively. The “Morgan” cores for multiprocessing and desktop systems are expected in the second half of 2001.



# Backup

# 1K Pricing



## ❑ Mobile AMD Athlon™ 4 Processor

- 1GHz US\$425
- 950MHz US\$350
- 900MHz US\$270
- 850MHz US\$240

## ❑ Mobile AMD Duron™ Processor

- 850MHz US\$197
- 800MHz US\$170

(all prices in 1000-unit quantities)

# Mobile AMD Athlon™ 4 Processor

## Features and Benefits



Feature	Benefit
AMD PowerNow!™ Technology	AMD PowerNow!™ technology is a revolutionary development that allows notebook computers to deliver high performance on demand while extending battery life. AMD PowerNow! technology can give you up to 30% more work time on the plane or the ability to watch an entire DVD movie on one battery. Travel lighter and smarter with AMD PowerNow! technology by leaving that extra battery at home.
Advanced Architecture and Higher Speeds	The mobile AMD Athlon™ 4 processor is designed to excel in the applications you use every day. By increasing frequency, AMD gives you the power to be more productive by running the world's most popular applications faster and smoother. The mobile AMD Athlon 4 processor is the highest performing notebook PC processor.
Low Power Design	Designed with the mobility market in mind, the mobile AMD Athlon 4 processor incorporates a new lower power design which decreases fan noise and gives you more battery time without compromising high performance.
Advanced 200 MHz Front Side Bus	The mobile AMD Athlon 4 processor's high-speed system bus is specifically designed to complement the next evolution in memory technology, DDR memory. Together they deliver the ultimate performance on data-rich applications, such as enhancing your music collection with MP3 encoders, surfing the Internet, playing DVDs and 3DGames, and video-editing packages.
High Performance Full-Speed Cache	The mobile AMD Athlon 4 processors have 384KBytes of on-chip, full-speed cache, the largest in their class for dramatically fast application performance, especially data intensive applications like 3D multimedia and games. The high-performance, full-speed cache also includes features like data pre-fetch, which looks ahead and automatically gathers the data the system needs to run your applications optimally.
3DNow!™ Professional	Software specifically tuned for 3DNow!™ technology means smoother, richer and more lifelike images, more precise digital 3D audio and an enriched Web experience. The mobile AMD Athlon 4 processor incorporates 3DNow! Professional technology, 52 new instructions which further extend the capability of 3DNow! technology to more software than any other processor in its class.
Superscalar FPU	The mobile AMD Athlon 4 boasts the fastest x87 floating point engine in its class—the world's only 3-pipe superscalar floating point unit for faster processing speed of real-world applications like Internet content, games and multimedia.

# Mobile AMD Athlon™ 4 Processor

## Competitive Comparison



	Mobile AMD Athlon™ 4 Processor	Mobile Intel Pentium® III Processor
<b>Date Architecture Introduced</b>	1999	1996
<b>Max Frequency</b>	1.0GHz	1.0GHz
<b>Front Side Bus Frequency</b>	200MHz	100/133MHz
<b>High-Performance Full Speed Cache</b>	384kB with data pre-fetch	288kB
<b>3D and Multimedia Software Optimization</b>	Yes - 3DNow!™ Professional Technology	Yes – SSE
<b>Power Management</b>	Automatic Mode – AMD PowerNow!™ technology	Fixed Mode - SpeedStep
<b>Superscalar Floating Point</b>	Yes	No

# The New Mobile AMD Duron™ Processor

## Features and Benefits



Feature	Benefit
AMD PowerNow!™ Technology	AMD PowerNow!™ technology is a revolutionary development that allows notebook computers to deliver high performance on demand while extending battery life. AMD PowerNow! technology can give you up to 30% more work time on the plane or the ability to watch an entire DVD movie on one battery. Travel lighter and smarter with AMD PowerNow! technology by leaving that extra battery at home.
Advanced Architecture	The new mobile AMD Duron™ processor gives you higher frequencies to be more productive when running the world's most popular applications, today and tomorrow. The new mobile AMD Duron processor offers the most compelling solution for value-conscious buyers.
Low Power Design	Designed with the mobile market in mind, the new mobile AMD Duron processor incorporates a new lower power design which decreases fan noise and extends battery life while delivering the same high performance.
High-Speed Front Side Bus	The system bus of the new mobile AMD Duron processor is specifically designed to deliver outstanding performance on data intensive applications. The high speed bus enables high bandwidth peripherals without performance penalty
High Performance Full-Speed Cache	Larger cache sizes mean better performance. The new mobile AMD Duron processors have the largest full-speed, on-chip caches in their class, increasing performance on popular applications.
3DNow!™ Professional Technology	Software specifically tuned for 3DNow!™ technology means better photo images, more robust audio, and an enriched Web experience.  The new mobile AMD Duron processors incorporate 3DNow! Professional technology, 52 new instructions which give it more performance-optimized software titles than any other processor in its class.
Superscalar FPU	The new mobile AMD Duron shares the world's only 3-pipe superscalar floating point unit with the AMD Athlon processors. The FPU increases processing speed of real-world applications like Internet content, games and multimedia.

# Mobile AMD Duron™ Processor Competitive Comparison



	Mobile AMD Duron™ Processor	Intel Pentium® III Processor	Intel Celeron Processor
<b>Date Architecture Introduced</b>	1999	1996	1996
<b>Frequencies</b>	850MHz, 800MHz	1GHz, 900MHz, 850MHz, 800MHz, 750MHz, 700MHz, 650MHz, 600MHz, 550MHz and 500MHz	750MHz, 700MHz, 650MHz, 600MHz, 550MHz and 500MHz
<b>Front Side Bus</b>	200MHz	100MHz	66/100MHz
<b>High Performance Full Speed Cache</b>	192KB with data pre-fetch	288KB	160KB
<b>3D and Multimedia Software Optimization</b>	Yes (3DNow!™ Professional Technology)	Yes – SSE	Yes – SSE
<b>Power Management</b>	Automatic Mode – AMD PowerNow!™ technology	Static – Intel SpeedStep Technology	No
<b>Superscalar Floating Point Unit</b>	Yes	No	No



# Broad Industry Support for AMD Processor-based Notebooks



- **Mobile chipset** support from both ALi and VIA

## ALi MAGiK1 M1647



- 200MHz Front Side Bus
- AGP 4X Interface
- PC-133/DDR
- Supports AMD PowerNow!™ technology

## VIA Apollo KT133A



- 200MHz Front Side Bus
- AGP 4X interface
- PC/VCM 133
- Supports AMD PowerNow! technology

- **BIOS** support from Phoenix and Insyde
- **Original Design Manufacturer** (ODM) support from Taiwan notebook manufacturers

# AMD Mobile Positioning



Performance  
Notebook

~\$1,800+

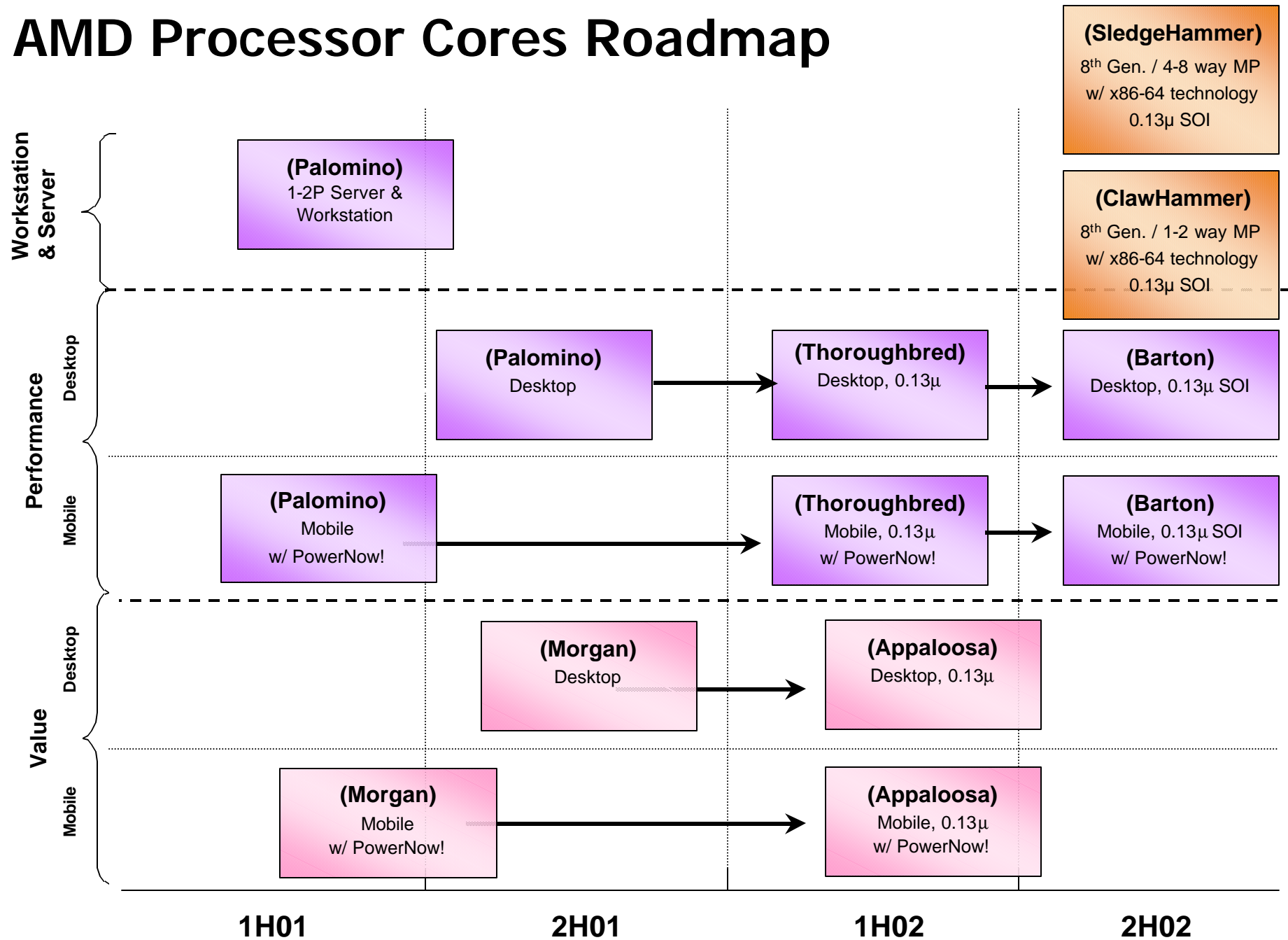


Value Notebook

<\$1,799



# AMD Processor Cores Roadmap





# System Configuration Information

# 1GHz AMD Athlon™ 4 Processor System Configurations



Operating System	Windows® Me	No service packs or updates were installed
Hardware	System	Compaq Socket A notebook (BIOS version B.00)
	Chipset	Via KT-133A
	Memory	128MB PC100 SDRAM
	Hard Drive	IBM DJSA-205
	Video Card	Rage Mobility AGP-M1 8MB
	Sound Card	Sound integrated into VIA Southbridge
Drivers	EIDE Drivers	Windows® Me - driver provided by Microsoft (DMA enabled in Device Manager)
	Network Card	Windows Me - "EL574ND4.SYS" v1.01.05.4004
	Sound Card	Windows Me - 4.10.3108 (provided by Via)
	Video Card	Driver CD provided by operating system

# 1GHz Intel Pentium® III Processor System Configuration



Operating System	Windows® Me	No service packs or updates were installed
Hardware	System	HP Pavilion N6395 (BIOS ver. EA.M1.20)
	Chipset	Intel 440BX
	Memory	128MB PC100 SDRAM
	Hard Drive	IBM DJSA-205
	Video Card	ATI Mobility 128 - 8MB
	Sound Card	Sound integrated in chipset
Drivers	EIDE Drivers	Windows® Me - driver provided by Microsoft (DMA enabled in Device Manager)
	Sound Card	Windows Me - "ES198x.sys" v5.12.01.1097
	Video Card	Windows Me – v4.12.2125

# 850MHz Intel Pentium® III Processor System Configurations



Operating System	Windows® Me	No service packs or updates were installed
Hardware	System	Dell Inspiron 8000, BIOS version A02
	Chipset	Intel i815
	Memory	128MB PC100 SDRAM
	Hard Drive	IBM DJSA-205
	Video Card	ATI Mobility 128 - 8MB
	Sound Card	Sound integrated into chipset
Drivers	EIDE Drivers	Windows® Me - driver provided by Microsoft (DMA enabled in Device Manager)
	Sound Card	Windows Me – driver CD provided with Dell system
	Video Card	Windows Me - driver CD provided with Dell system

# Mobile AMD Duron™ Processor System Configurations



Operating System	Windows® Me	No service packs or updates were installed
Hardware	System	Compaq Socket A notebook (BIOS version B.00)
	Chipset	Via KT-133A
	Memory	128MB PC100 SDRAM
	Hard Drive	IBM DJSA-205
	Video Card	Rage Mobility AGP-M1 8MB
	Sound Card	Sound integrated into VIA southbridge
Drivers	EIDE Drivers	Windows Me - driver provided by Microsoft (DMA enabled in Device Manager)
	Network Card	Windows Me - "EL574ND4.SYS" v1.01.05.4004
	Sound Card	Windows Me - 4.10.3108 (provided by Via)
	Video Card	Driver CD provided by operating system



# Mobile Celeron Processor System Configurations



Operating System	Windows® Me	No service packs or updates were installed
Hardware	System	Dell Inspiron 3800, BIOS version A09
	Chipset	Intel 440BX
	Memory	128MB PC100 SDRAM
	Hard Drive	IBM DJSA-205
	Video Card	ATI Mobility 8MB
	Sound Card	Sound integrated with Intel chipset
Drivers	EIDE Drivers	Windows® Me - driver provided by Microsoft (DMA enabled in Device Manager)
	Network Card	Windows Me - "EL574ND4.SYS" v1.01.05.4004
	Sound Card	Windows Me - driver CD provided with Dell system
	Video Card	Windows Me - driver CD provided with Dell system

# Ziff Davis BatteryMark™

## System Configuration for 1GHz AMD Athlon Processor



Operating System	Windows® Me	No service packs or updates were installed
	Windows 2000	No service packs or updates were installed
Hardware	System	Hewlett-Packard Socket A notebook (BIOS v. aGD.MO.34)
	Screen Resolution	1024x768x32bits
	Chipset	ALi 1647 MAGiK 1
	Memory	128MB PC100 SDRAM
	Hard Drive	IBM DJSA-205
	Video Card	Trident Cyberblade XP 8MB
	Sound Card	Integrated sound
	Battery	HPf2024a LiON 11.1V 5400mHA
Drivers	EIDE Drivers	Windows® Me - driver provided by Microsoft (DMA enabled in Device Manager)
	Sound Card	Windows Me - "ES198x.sys 5.12.1.1118"
	Video Card	Windows Me - "Tridxpm.sys 5.00.2195.0086"

# AMD Athlon System Configurations



Operating System	Windows® Me	Restore disabled, DirectX 8.0
Hardware	Motherboard	Gigabyte GA-7DX Rev 3.0
	Chipset	AMD-760™ chipset
	Memory	256MB DDR SDRAM
	Hard Drive	IBM UDMA 100 30GB
	Network Card	AT-2700TX
	Video Card	Winfast GeForce2 Ultra 64MB DDR
Drivers	EIDE Driver	GigaByte 7dx.f2c
	Network Card	Driver provided by Microsoft
	Video Card	AMD miniport 4.80, Detonator 6.50

# Cautionary Statement



This presentation contains forward-looking statements, which are made pursuant to the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements are generally preceded by words such as "expects", "plans", "believes", "anticipates", or "intends." Investors are cautioned that all forward-looking statements in this presentation involve risks and uncertainty that could cause actual results to differ materially from current expectations. Forward-looking statements in this presentation about AMD processor products involve the risk that AMD may not successfully produce the mobile AMD Athlon™ 4 and new AMD Duron™ processors in volumes demanded by the market, that such processors may not receive customer or market acceptance, that support for AMD's seventh-generation mobile processor infrastructure may not adequately support AMD's production and marketing plans, that OEM partner systems incorporating mobile AMD Athlon 4 and new AMD Duron processors may not be released on schedule or at all, and that AMD's new seventh-generation processors and platforms may not be developed or released as planned. We urge investors to review in detail the risks and uncertainties in the company's U.S. Securities and Exchange Commission filings, including the most recently filed Form-10K.

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